

**WHAT IS CLAIMED IS:**

1. A method for controlling a paging alert level of a mobile station in a mobile communication system, comprising the steps of:

5 setting information of a type and a level of a paging alert tone of the mobile station in a broadcasting channel (BCH) message and transmitting the BCH message from a base station to every mobile station within a cell of the base station; and

generating, in the mobile station, a paging alert tone according to the information of the type and the level of the paging alert tone, included in the BCH message.

10 2. A method for controlling a paging alert level of a mobile station in a mobile communication system having a base station which transmits a signal to every mobile station within a cell, comprising the steps of:

15 receiving information of a type and a level of a paging alert tone of a mobile station from the base station through a BCH, and determining whether the mobile station is located in a paging alert level-restricted area; and

generating a paging alert tone according to the information of the type and the level of the paging alert tone, if the mobile station is located in the paging alert level-restricted area.

20 3. The method as claimed in claim 2, wherein the BCH message is generated such that the paging alert type is distinguishable according to surrounding features of the base station.

4. The method as claimed in claim 2, further comprising the step of rejecting restriction of the paging alert level designated in the BCH message within a predetermined time.

5. The method as claimed in claim 2, wherein the mobile station displays a message indicating that the mobile station is presently located in the paging alert level-restricted area.

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6. The method as claimed in claim 2, wherein the mobile station generates an alert tone indicating that the mobile station is presently located in the paging alert level-restricted area.

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7. The method as claimed in claim 2, wherein the mobile station displays an icon indicating that the mobile station is presently located in the paging alert level-restricted area.

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8. The method as claimed in claim 2, wherein the mobile station generates a paging alert tone according to a paging alert level designated in the received BCH message, upon receipt of an incoming call.

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9. The method as claimed in claim 2, wherein the mobile station automatically restores the paging alert level to a paging alert level previously set by a user, when the mobile station moves out of the paging alert level-restricted area.

10. The method as claimed in claim 9, wherein the mobile station displays a message indicating restoration of the paging alert level preset by the user.

11. The method as claimed in claim 9, wherein the mobile station generates an alert tone indicating restoration of the paging alert level preset by the user.

5 12. A method of controlling a paging alert tone of a mobile station being served by a base station in a mobile telecommunication system, said method comprising the steps of:

generating a paging alert class information in a BCH message of the base station, said  
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paging alert class information indicating an alert type and an alert level of the paging alert tone;  
transmitting the BCH message including the paging alert class information to the mobile  
station;

10 receiving the BCH message from the base station and detecting the paging alert class information; and

setting the paging alert tone of the mobile station in accordance with the received  
paging alert class information.

15 13. The method of claim 12, further comprising the step of:  
determining whether the mobile station is in an alert level restricted area,  
wherein the received paging alert class information sets the paging alert tone to a  
restricted mode if the mobile station is in the alert level restricted area.

20 14. The method of claim 13, further comprising the step of:  
informing an user of the mobile station that the paging alert tone of the mobile station is  
set to the restricted mode.

15. The method of claim 14, further comprising the step of:  
alerting the user to either accept or reject the restricted mode.

16. The method of claim 15, further comprising the steps of:  
rejecting the restricted mode if the user rejects the restricted mode; and  
setting the paging alert tone to the restricted mode if the user does not respond within a  
preset time.